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**STATE OF NEW MEXICO  
ENVIRONMENTAL IMPROVEMENT BOARD**

**IN THE MATTER OF PROPOSED NEW REGULATION,  
20.2.50 NMAC – *Oil and Gas Sector – Ozone Precursor Pollutants*      No. EIB 21-27 (R)**

**ENVIRONMENTAL DEFENSE FUND, CONSERVATION VOTERS NEW MEXICO,  
DINÉ C.A.R.E., EARTHWORKS, NATIONAL PARKS CONSERVATION  
ASSOCIATION, NATURAL RESOURCES DEFENSE COUNCIL, SAN JUAN  
CITIZENS ALLIANCE, SIERRA CLUB, 350 NEW MEXICO, 350 SANTA FE, CENTER  
FOR CIVIC POLICY, NAVA EDUCATION PROJECT, AND NEW MEXICO  
ENVIRONMENTAL LAW CENTER’S  
JOINT CLOSING ARGUMENT**

Pursuant to the Hearing Officer’s Procedural Order on Post-Hearing Process and amendment thereto, the Environmental Defense Fund, Conservation Voters New Mexico, Diné C.A.R.E., Earthworks, National Parks Conservation Association, Natural Resources Defense Council, San Juan Citizens Alliance, Sierra Club, 350 New Mexico, 350 Santa Fe, Center for Civic Policy, NAVA Education Project, and New Mexico Environmental Law Center (collectively, “Community and Environmental Parties”) respectfully submit their Joint Closing Argument for consideration by the New Mexico Environmental Improvement Board (“EIB”).

A Table of Contents and the Community and Environmental Parties’ Closing Argument follows.

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### **Preliminary Statement**

The Community and Environmental Parties propose five amendments to the New Mexico Environment Department's ("Environment Department") proposed 20.2.50 NMAC which strengthen provisions for:

- Engines at 20.2.50.113 NMAC,
- Leak detection and repair ("LDAR") at 20.2.50.116 NMAC,
- Pneumatic controllers at 20.2.50.122 NMAC,
- Storage vessels at 20.2.50.123 NMAC, and
- Completions and recompletions at 20.2.50.127 NMAC.

Each of the Community and Environmental Parties' proposals will result in greater emissions reductions of ozone precursors from that that proposed by the Environment Department, is cost effective, and is supported by substantial evidence in the record.

Not only will the Community and Environmental Parties' proposals achieve greater reductions of ozone precursors, but the proposals have the co-benefits of achieving greater emissions reductions of methane, a potent greenhouse gas, and greater reductions of toxic air pollutants that harm public health.

With this rulemaking, New Mexico has a unique opportunity to ensure that federal health-based ozone standards are met, dramatically reduce methane emissions to do our part to tackle climate change, and protect local communities from the demonstrable and serious public health threats of air pollutants from oil and gas operations. If New Mexico is to pass the "toughest rules in the nation," as the Governor has promised, the EIB should exercise its full statutory authority to protect human health and the environment and adopt each of the Community and Environmental Parties' proposals.

## Argument

### **I. THE EIB SHOULD EXERCISE ITS STATUTORY AUTHORITY TO PROTECT PUBLIC HEALTH AND THE ENVIRONMENT AND ENSURE ITS RULES DO NOT HAVE DISPARATE IMPACTS**

The EIB has a mandatory duty under the Air Quality Control Act (“AQCA”) to promulgate rules that “prevent or abate air pollution,” NMSA 1978, § 74-2-5.A, B. The EIB has a specific obligation to adopt a plan and promulgate rules to “control emissions of nitrogen and volatile organic compounds” from sources that “cause or contribute to ozone concentrations” in areas of the state where ozone concentrations are “in excess of ninety-five percent of the primary national ambient air quality standard for ozone.” NMSA 1978, § 74-2-5.C. Together, the plan and rules shall “provide for attainment and maintenance” of the federal ozone standard. *Id.*

The AQCA also directs that the EIB “shall give weight it deems appropriate” to broad “public health,” “welfare,” and “public interest” factors in determining what mix of performance standards to establish to control ozone. NMSA 1978, § 74-2-5.F. The plain language of the statute and court decisions teach that in considering these factors, the EIB may consider co-benefits to health and welfare such as reductions of methane emissions and toxic pollutants that harm human health. Finally, the EIB has a specific obligation to consider how its mix of performance standards can provide benefits to people of color, Native Americans and other disadvantaged groups.

#### **A. AQCA Authorizes EIB to “Give Weight it Deems Appropriate” to Public Health, Welfare, and the Public Interest in Promulgating the Rule**

The EIB is governed in this rulemaking by criteria established in Section 74-2-5.F. *See* NMED Statement of Reasons at 5 (identifying criteria that apply to this rulemaking). The standard requires that in rulemakings, the EIB “shall give weight it deems appropriate to all facts and circumstances, including: (1) character and degree of injury to or interference with health,

welfare, visibility and property; (2) the public interest, including the social and economic value of the sources and subjects of air contaminants; and (3) technical practicability and economic reasonableness of reducing or eliminating air contaminants from the sources involved and previous experience with equipment and methods available to control the air contaminants involved.” NMSA 1978, § 74-2-5.F.

The EIB must give the words “health, welfare” and “public interest” their broad plain language meanings. As the New Mexico Supreme Court teaches, words in a statute are to be given “their ordinary meaning unless the legislature indicates a different intent.” *High Ridge Hinkle Joint Venture v. City of Albuquerque*, 1998-NMSC-050, ¶ 5; *see also Sw. Org. Project v. Albuquerque-Bernalillo Cty. Air Quality Control Bd.*, 2021-NMCA-005, ¶ 11 (applying *Hinkle* in AQCA context). Because the AQCA does not define these terms, *see* NMSA 1978, § 74-2-2 (definitions section), or otherwise “indicate a different intent,” the words must be given their broad, commonly-understood meaning.

**B. The EIB Has Full Statutory Authority to Consider Co-Benefits**

Industry parties have suggested that the EIB may not consider the co-benefits of reducing ozone precursors in determining what combination of measures to adopt in the rule to meet the state's ozone control obligations. For example, the parties objected (unsuccessfully) to any evidence that was related to reduction of methane on the theory that such evidence was improper because it was not related to achieving and maintaining the National Ambient Air Quality Standards or NAAQS for ozone, but rather is a greenhouse gas that contributes to climate change. 8 Tr. 2344:15-2350:23 (hearing officer consideration of the Independent Petroleum Association of New Mexico (“IPANM”) objection).

The industry parties’ assertion flies in the face of the plain language of the AQCA, which

authorizes the EIB to “give weight it deems appropriate” to multiple factors in this rulemaking, including costs to industry, but also explicitly including health, welfare, and the public interest. NMSA 1978, § 74-2-5.F.

In promulgating rules, the EIB is being asked to promulgate multiple performance standards that apply to diverse elements of the oil and gas supply chain. *See* NMED Statement of Reasons at 8-11. Together these standards, along with other elements of the Environment Department’s plan to control ozone, must at least “achieve and maintain” the federal ozone standard, NMSA 1978, § 74-2-5.C.

Industry parties have consistently argued in this rulemaking that specific standards proposed by the Environment Department or other parties are too costly. *See e.g.*, 8 Tr. 2355:10-17 (New Mexico Oil and Gas Association (“NMOGA”) attorney stating “NMOGA has addressed throughout this hearing its concerns about the frequency and cost of LDAR provisions in the testimony of Mr. Smitherman and in a number of its exhibits”). In doing so, industry parties are asking the EIB to give substantial weight to one of the factors under Section 74-2-5.F – economic reasonableness to industry – while arguing that the EIB may not even consider other factors that are explicitly listed in the statute, *i.e.*, health, welfare, and public interest benefits.

The Community and Environmental Parties do not dispute that the EIB may consider economic reasonableness, although the Parties often challenge the accuracy and credibility of the cost assertions. *See generally* discussion *infra*.

But in the same light, the EIB is equally authorized to consider health, welfare, and public interest benefits of the various proposed standards, and to give those benefits “the weight it deems appropriate.” In other words, the EIB may consider and decide how to weigh evidence that reducing ozone precursor emissions will also reduce health harms from volatile organic

compounds to people living in close proximity to oil and gas wells or reduce greenhouse gas pollution and the benefit to the public interest in reducing the climate-warming emissions from methane.

This conclusion is consistent with the New Mexico Supreme Court's ruling in *Public Service Company of New Mexico v. New Mexico Environmental Improvement Board*, 1976-NMCA-039, because consideration of co-benefits in the current rulemaking is distinguished from facts in that case in several ways.

In *Public Service Company*, the court held that a rule to meet the state sulfur dioxide ambient air quality standard was unlawful because the EIB required existing sources to reduce emissions to a level that would make available "more room ... for new industry in the Four Corners area." 1976-NMCA-039, ¶ 6, 10. Notably, in *Public Service Company* the EIB was establishing regulations to meet a **state** ambient air quality standard it had itself previously established. *Id.* at ¶ 19. The court found that in that circumstance, the EIB had **already** considered statutory criteria, including health and welfare, in setting the standard, and could not reconsider those factors outside of setting a new ambient air quality standard. *Id.* ("The EIB having set the standard is bound by it, the same as anyone else.").

Here, however, the EIB is being petitioned to promulgate regulations to achieve and maintain a **national** ambient air quality standard **established by the EPA**. NMED Ex. 1 at 3-5 [Baca Test.] (citing authority in Section 74-2-5.C to control ozone precursors in areas that exceed 95% of the federal NAAQS, and describing how the EPA, not the EIB, set the current NAAQS level for ozone); *see also* 20.2.3.110-111 NMAC (setting state ambient air quality standards for sulfur compounds and other pollutants but not for ozone).

Unlike in *Public Service Company*, the EIB has not already considered how the factors of

“health,” “welfare,” and the “public interest” should affect the level of emission reductions to be required **from the oil and gas sector** as one step in its plan to “achieve and maintain” the federal standard under Section 74-2-5.C.<sup>1</sup> See NMED Statement of Reasons at 7 (proposed rule is one of a “series of rules and voluntary measures” under ozone attainment plan to achieve and maintain ozone standards). This is very different from the situation in *Public Service Company*, where the EIB “established a standard and then adopted regulations that required performance far beyond that necessary to meet the standard.” *Kennecott Copper Corp. v. N.M. Env’t Improvement Bd.*, 1980-NMCA-007, ¶ 9, writ quashed sub nom. *Kennecott Copper Corp. v. N.M. Env’t Improvement Bd.*, 94 N.M. 675 (1980). Here the EIB may consider “health,” “welfare,” and the “public interest” in determining the mix of performance standards to adopt in this rule as one element of its plan to achieve and maintain the federal ozone standard.

Another distinguishing factor is that in *Public Service Company* the EIB cited as its rationale economic development concerns. The court found, however, that “nothing in the EIB’s mandate that gives it the authority to plan for ... industrial development.” *Pub. Serv. Co.*, 1976-NMCA-039, ¶ 17. In contrast, Environmental Parties here urge the EIB to consider other **air pollution** reduction co-benefits when deciding what mix of performance measures the EIB should require in order to meet its obligations to control ozone. As the court stated in *Public Service Company*, “[t]he ‘legislative mandate’ of the Air Quality Control Act is expressed in simple and direct language: The board shall prevent or abate air pollution.” *Id.* at ¶ 7 (internal quotations omitted). Considerations of co-benefits related to ozone precursor air pollution reductions are therefore squarely within the EIB’s legislative mandate.

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<sup>1</sup> Section 74-2-5.G. also provides EIB the option, if it chooses, to promulgate rules more stringent than required by the federal standard as long it finds that they are more protective of the public health and environment as long as the EIB makes the required determination.

Finally, consideration of both indirect costs **and** co-benefits in rulemaking is widely mandated by courts. *See e.g., Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1198-1200 (9th Cir. 2008) (holding a National Highway Traffic Safety Administration rule unlawfully arbitrary for failing to consider greenhouse gas benefits of fuel economy standards, concluding this “put a thumb on the scale by undervaluing the benefits and overvaluing the costs.”).

C. **EIB Has a Specific Duty to Consider Disparate Impacts and Environmental Justice**

Finally, the EIB has a special obligation to give weight to information submitted by the public that bears on the disparate impact of ozone precursor pollution from oil and gas sources on people of color, Native American communities, and other marginalized groups.

First, the EIB is subject to Executive Order 2005-056: Environmental Justice Executive Order. *See* CCP/NAVA EP Ex. 6 at 13-14 [Villa Reb. Test] (Prof. Villa testifying that based on his understanding, order is still in effect). That order requires, among other things, that “all ... boards ... provide meaningful opportunities for involvement to all people regardless of race, color, ethnicity, religion, income, or education level” and that “all relevant ... boards ... utilize available environmental and public health data to address impacts in low-income communities and communities of color....” Exec. Order 2005-056 at 1-2.

The Executive Order is a type of “internal procedural rule.” When the government fails to follow such “internal procedural rules” in administrative actions, it is engaged in unlawful arbitrary rulemaking. *See Morton v. Ruiz*, 415 U.S. 199 (1974) (overturning administrative action by agency as arbitrary under the federal Administrative Procedure Act because it was inconsistent with internal procedures); *see also* NMSA 1978, § 74-2-9.C (EIB action will be invalidated if arbitrary).

Second, under precedent set by the New Mexico Supreme Court in *Colonias Development Council v. Rhino Environmental Services Inc. (“Rhino”)*, the EIB must consider environmental justice considerations when such considerations are raised by the public and have a nexus to relevant statutory provisions. 2005-NMSC-024. Both those factors are present here.

In *Rhino*, the court held that Secretary of the Environment Department unlawfully declined to consider lay testimony related to “environmental justice” issues with regard to the approval of a landfill permit under the Solid Waste Act. The court held that administrative bodies “cannot ignore concerns that relate to environmental protection simply because they are not mentioned in a technical regulation. The Department has a duty to interpret its regulations liberally in order to realize the purposes of the Acts.” *Id.* at ¶ 34.

The court specifically found that two factors are necessary in order to authorize an administrative body to act on factors related to environmental justice. First, the statute must include robust public participation provisions, demonstrating that the legislature “clearly believed public participation is vital to the success of the ... Act.” *Rhino*, 2005-NMSC-024, ¶ 24. The New Mexico Court of Appeals has already found that “Similar to the Solid Waste Act, the [Air Quality Control Act] is “replete with references to public input.” *Sw. Org. Project v. Albuquerque-Bernalillo Cty. Air Quality Control Bd.*, 2021-NMCA-005, ¶ 20.

Second, in order to actually have the authority to addresses those environmental justice concerns, the act or regulations in question must provide a “nexus” or “bear a relationship to” the environmental provisions the administrative body is charged with implementing. *Rhino*, 2005-NMSC-024, ¶¶ 29, 30.

In *Rhino*, the court found that a sufficient nexus existed between the issues raised by lay witnesses from the community and the regulations governing landfill permit approvals. The

witnesses presented testimony that the area was a “low-income border community that is being overrun by industrial sites including numerous pre-existing landfills.” *Id.* at ¶ 32. The landfill permitting regulations required the Secretary to consider whether the facility “demonstrates that neither a hazard to public health, welfare, or the environment nor undue risk to property will result” and required that such facilities be located and operated “in a manner that does not cause a public nuisance or create a potential hazard to public health, welfare or the environment.” *Id.* The court found that because the public was providing testimony related to the cumulative effects of multiple landfills on health and welfare, and because the relevant permitting regulations required the administrative body to consider health and welfare, a sufficient nexus existed that required the administrative body to consider those public comments. *Id.* at ¶ 32.

The same nexus exists in this rulemaking. Numerous expert and lay witnesses have provided testimony expressing concerns that emissions of nitrogen oxides and volatile organic compounds from oil and gas well sites disproportionately put at risk the health of people of color, Native Americans, children, the elderly, and those with pre-existing health conditions. *See e.g.*, NMELC Ex. 1 [Pasqual Test.]; CAA Ex. 25 [Hill Reb. Test.]; EDF Ex. SS at 1 [Hull Test.]; CCP/NAVA EP Ex. 6 [Villa Reb. Test.]; CCP/NAVA EP Ex. 3 [Povijua Test.]; CCP/NAVA EP Ex. 3 [Hernandez Test.]. The AQCA’s statutory requirement to consider “health” and “welfare” in this rulemaking is analogous to the regulatory requirement to consider “health” and “welfare” in landfill permitting, and hence provides the required nexus to authorize and require the administrative body to address environmental justice issues. *See* NMSA 1978, § 74-2-5.F(1).

The Court of Appeals analysis of the *Rhino* precedent in an air quality permitting context also supports this conclusion. In *Southwest Organizing Project v. Albuquerque-Bernalillo County Air Quality Control Board* (“*SWOP*”) the court was asked to find that the Albuquerque-

Bernalillo local board unlawfully failed to consider environmental justice testimony from lay participants in a permitting action under the AQCA. 2021-NMCA-005, ¶ 1. The court in *SWOP* found that the required nexus between the testimony and the statute was “conspicuously absent from [the AQCA’s] **permitting provisions**.” *Id.* at ¶ 29 (emphasis added). Indeed, the statutory provisions of the act pertaining to **permitting** in Section 74-2-7 do not include any requirement that the administrative body broadly consider “health,” “welfare,” or the “public interest.” In contrast, the **rulemaking** provisions in Section 74-2-5.F., do require such consideration. Consistent with the court’s analysis in *SWOP*, **rulemaking** under Section 74-2-5 therefore does create the required nexus to authorize the EIB acting on environmental justice issues, whereas **permitting** under Section 74-2-7 does not.

Finally, courts and administrative bodies widely interpret statutory criteria including “health” and “welfare” as authorizing or requiring consideration of potential disparate impacts to the health of communities of color and other disadvantaged groups. For example, the United States Court of Appeals for the Fourth Circuit recently held in *Friends of Buckingham v. State Air Pollution Control Board* that the Virginia Air Pollution Control Board—a board that performs an essentially identical function to the EIB—was required to take into account environmental justice considerations under a similar state air pollution control law. 947 F.3d 68 (4th Cir. 2020). The court found that the board “failed in its statutory duty to determine the **character and degree of injury to the health**” because it failed to adequately consider the disparate impacts of its approval of an air permit for a compressor station on a predominately African-American community. *Id.* at 71, 93 (emphasis added). Other courts have ruled similarly. *E.g., Vecinos para el Bienestar de la Comunidad Costera v. FERC*, 6 F.4th 1321, 1330 (D.C. Cir. 2021) (finding that agency performed inadequate assessment of disparate impacts under

National Environmental Policy Act requirement to assess impacts to “human environment.”). As Prof. Clifford J. Villa, a national expert in the law of environmental justice, testified, “there is now a thirty-year history of federal and state action, and judicial opinions, that recognize that the disparate impacts of pollution on marginalized communities is a critical component of the ‘character and degree’ of public health impacts.” CCP/NAVA EP Ex. 6 at 12-16.

In sum, the EIB has a mandatory duty to promulgate rules to control ozone precursor emissions from sources in areas that are within 95% of the federal national ambient air quality standard for ozone. The EIB must promulgate rules and adopt a plan that will at least “achieve and maintain” the standard. In determining what mix of performance standards to include in the rule, the EIB “shall give weight it deems appropriate” to “health,” “welfare,” and “the public interest.” Consideration of co-benefit pollutant reductions falls squarely within the EIB’s authority since methane and hazardous air pollutants adversely impact health, welfare and the public interest. In addition, as part of these considerations, the EIB must specifically consider evidence related to disparate impacts of air pollution.

## **II. EACH OF THE COMMUNITY AND ENVIRONMENTAL PARTIES’ PROPOSALS STRENGTHENS THE RULE, IS COST EFFECTIVE, AND IS SUPPORTED BY SUBSTANTIAL EVIDENCE**

### **A. The Community and Environmental Parties and the National Park Service’s Proposal to Strengthen the Engines Provision Should Be Adopted**

#### **1. Substantial evidence supports the proposal to strengthen regulation of existing 4SLB engines**

The Community and Environmental Parties and the National Park Service propose to amend the Environment Department’s engine rule to include more protective standards for existing 4-stroke lean-burn engines (“4SLBs”). The Community and Environmental Parties propose a standard of **1.2 grams of NO<sub>x</sub> per horsepower hour** for existing 4SLBs with a rated horsepower between 1,000 and 1,775, a standard consistent with that currently in effect in

Colorado. This proposal is substantially more protective than the standard the Environment Department currently proposes for these engines (which, at 2.0 grams of NOx per horsepower hour, is 40% higher than the standard applicable to identical engines in Colorado), but not as stringent as the Department's original proposal of 0.5 grams of NOx per horsepower hour.

2. **The proposed standard of 1.2 grams of NOx per horsepower hour is cost-effective and achievable**

The weight of the evidence shows that a standard of 1.2 grams of NOx per horsepower hour is cost effective and achievable. The Colorado Air Pollution Control Division conducted a regulatory impact analysis for its 2019 rule and found the standard to be cost effective and achievable for all existing 4SLBs. The rule has been implemented there without difficulty. Other jurisdictions have implemented even stricter limits for these engines. For example, since 2007, Texas has required existing lean-burn engines in the Dallas-Fort Worth ozone nonattainment area to meet a standard of **0.7 grams of NOx per horsepower hour**. See 30 Tex. Admin. Code § 117.2110(a)(1)(B)(i). In fact, since any lean-burn engine built since 2010 must already comply with a 1.0 grams of NOx per horsepower hour standard under federal law (40 C.F.R. § 60.4230, subpart JJJJ, Table 1) a significant number of existing engines are already complying with the standard proposed by the Community and Environmental Parties and the National Park Service.

No party presented evidence why New Mexico operators could not achieve a relatively lax limit of 1.2 grams of NOx per horsepower hour at existing 4SLBs. NMOGA's analysis was focused on showing that the cost to bring emissions down to 0.5 gram of NOx per horsepower hour would be excessive. 9 Tr. 2978:13–17; *see also* NMOGA, Statement of Intent to Present Technical Testimony at 83–91.

Even if there were evidence showing that some existing 4SLBs cannot comply with a

standard of 1.2 grams of NO<sub>x</sub> per horsepower hour at reasonable cost, this would not show that the proposal of Community and Environmental Parties and the National Park Service is unachievable. That is because Section 113 contains numerous alternative compliance options in the event a particular engine cannot comply with the proposed standard at reasonable cost. For example, an operator can reduce the annual hours of operation, average emissions across the operator's entire fleet of engines, and seek exemptions for particular engines that cannot meet the standard in a cost-effective manner. 9 Tr. 2979:7–15; 6 Tr. 1679:11–1682:5. NMOGA's expert Justin Lisowski acknowledged that the alternative compliance mechanisms included in the Environment Department's proposal could, if properly implemented, allay concerns about adopting a more stringent standard for existing 4SLBs. 9 Tr. 2995:8–24.

**3. The Environment Department's proposal does not go far enough in reducing dangerous NO<sub>x</sub> emissions**

The evidence indicates that the Environment Department's modified proposal is far too lax and will leave many cost-effective emission reductions on the table. Engines and turbines are by far the largest source of NO<sub>x</sub> emissions from the oil-and-gas industry. *See* 9 Tr. 2974:19–20 [Orozco Test.]; NMOGA Statement of Intent to Present Technical Testimony at 97 [Valor EPC Study: NMAC 20.2.50.113, Engines and Turbines]. Ozone formation in New Mexico is often NO<sub>x</sub> limited. Accordingly, reducing NO<sub>x</sub> from engines and turbines is an important strategy for reducing ozone levels in New Mexico. 9 Tr. 2974:21–23.

Unfortunately, the Environment Department's most recent proposal does far too little to reduce dangerous NO<sub>x</sub> pollution from engines. The regulations the Environment Department proposed as part of its Petition for Regulatory Change would have reduced NO<sub>x</sub> emissions from engines by a total of **18,000 tons per year**. However, the regulations included in the Environment Department's rebuttal testimony are expected to reduce NO<sub>x</sub> emissions by only

**5,000 tons per year.** 6 Tr. 1708:12–14 [Palmer Test.].

The Environment Department estimates that the NO<sub>x</sub> controls for engines included in its rebuttal testimony will cost \$11.4 million a year to implement, reducing 5,000 tons of NO<sub>x</sub>. See 6 Tr. 1678:6–8. This amounts to a cost of \$2,280 per ton of NO<sub>x</sub> reduced. Emission controls that cost \$7,500 a ton of NO<sub>x</sub> or less are generally deemed cost-effective. 6 Tr. 1703:19–1704:19 [Bisbey-Kuehn Test.]. In other words, the Environment Department’s proposal inappropriately leaves cost-effective emission reductions “on the table.”

In sum, while the Environment Department’s original proposal might have faced strong industry opposition as overly stringent and costly, the Department overcorrected in its rebuttal, setting forth proposals that are far too lax, that will do too little reduce dangerous NO<sub>x</sub> pollution. Moderately increasing the stringency of the standards applicable to existing 4SLBs, as Community and Environmental Parties and the National Park Service propose to do, will partially correct for the Environment Department’s overcorrection and deliver additional emission reductions for New Mexico at reasonable cost.

**4. Substantial evidence supports the proposal to apply more stringent new source standards to newly “installed” engines**

The Community and Environmental Parties and the National Park Service propose returning to the Department’s proposal in its Petition for Regulatory Change, which treats all engines or turbines “installed” after the effective date of the rule as “new” equipment subject to more stringent new-source standards.

The regulations the Environment Department proposed as part of its Petition would have treated newly “installed” engines as new sources subject to the most stringent emission limits. The rebuttal version deleted this proposal. See NMED Reb. Ex. 23 at 9 [redline showing changes to Section 113 adopted between Petition/direct NOI and rebuttal NOI]. The

Environment Department did not provide an explanation why it deleted this proposal. *See* NMED Reb. Ex. 1 at 28.

The evidence indicates that, if operators can install old engines at new facilities in New Mexico without complying with new engine standards, New Mexico may become a dumping ground for old, high-pollution equipment that is no longer allowed in other states. 9 Tr. 2976:1–7. Notably, Colorado applies more stringent new source controls to engines that are “placed in service, modified, **or relocated**” after the effective date of its engines rule. 5 Colo. Code Regs. § 1001-9-E-I (Table 2) (emphasis added). New Mexico should do the same.

**B. The Community and Environmental Parties, Environment Department, and Oxy’s Proposal to Increase LDAR Inspections to Protect Persons in Close Proximity to Oil And Gas Wells Should Be Adopted**

**1. A coalition of parties supports the proximity proposal**

Prior to and during hearing, the Community and Environmental Parties and Oxy came to a consensus on the proposal to increase the frequency of inspections at well sites located within 1,000 feet of an “occupied area.” *See, e.g.*, CAA Ex. 26 at 17 [Joint Proposed Second Revised Amendments to Proposed 20.2.50 NMAC]; Oxy Reb. Ex. 1 at 16. At the close of evidence on this section during the hearing, the Environment Department adopted the proximity proposal as well and proposes it for adoption by the EIB. 8 Tr. 2774:24-2775:9; *see* NMED Proposed 20.2.50 NMAC - Dec. 16, 2021 Version. Notably, there is widespread support for the proximity proposal.

Implementation of the proximity proposal will help keep New Mexico in compliance with federal ozone standards and has the co-benefits of reducing methane, a potent greenhouse gas, and reducing air pollutants harmful to human health. People who live, work, and play in close proximity to oil and gas operations are at higher risk of suffering from adverse health

impacts due to exposure to pollutants emitted from oil and gas operations. In New Mexico, substantial numbers of persons of color, Native Americans, and vulnerable individuals live within 1,000 feet of well sites, many of whom already suffer from health conditions that can be exacerbated by exposure to additional pollution from oil and gas sources. The benefits of this proposal are great while the costs are reasonable.

**2. The proximity proposal will reduce VOCs and help New Mexico stay in attainment with federal health-based standards for ozone**

The proximity proposal will reduce volatile organic compounds that contribute to ozone pollution, thereby helping New Mexico protect clean air and remain in attainment with the National Ambient Air Quality Standards for Ozone. EDF Ex. TT at 3. EDF estimates that the proximity proposal will impact 3,365 or 7.7% of the sites in the state, will reduce VOC emissions by 3,600 tons per year, and will increase VOC emissions reductions at those sites by 73%. This resulting reduction in VOCs will help New Mexico reduce local formation of ozone and help New Mexico stay in attainment of the National Ambient Air Quality Standards for ozone. 8 Tr. 2718:6-22, -2595:19-20.

**3. The proximity proposal results in co-benefits by reducing methane and Hazardous Air Pollutant emissions**

The proximity proposal will secure important co-benefits by reducing 14,300 tons of methane and 150 tons of hazardous air pollutant annually. 8 Tr. 2593:21-23; EDF Ex. SS at 11.

**4. Oil and gas operations emit air pollutants harmful to human health**

Air pollutants hazardous to human health, the environment, and the climate — including greenhouse gases, hazardous air pollutants, and criteria air pollutants — are emitted from upstream oil and gas development sites. CCA Ex. 25 at 1 [Hill Reb. Test.]. Air pollutants emitted directly from oil and gas facilities may also contribute to the secondary formation of air pollutants in the atmosphere that also pose risks to human health and the environment (e.g.,

ground-level ozone). CCA Ex. 25 at 1.

At least **61 HAPs** have been measured near upstream oil and gas sites or investigated from secondary data sources in the peer-reviewed literature. HAPs emitted from oil and gas facilities include benzene which is a known human carcinogen, toluene, ethylbenzene, xylene, and n-hexane. CCA Ex. 25 at 7-9. The risks to human health from VOCs emitted from oil and gas facilities are many and varied and include harm to the central nervous system, eyes, skin and respiratory tracts, as well as the liver, kidney, and endocrine systems. CCA Ex. 25 at 7-9.

**5. Persons living, working, and going to school near oil and gas facilities are at greater risk due to emissions of air pollutants**

Chronic or long-term exposure to VOCs, NO<sub>x</sub>, and ground-level ozone may result in longer lasting or more severe public health consequences. Generally, the duration of exposure is a key factor that influences the development of adverse health outcomes. CAA Ex. 25 at 10. There is a reasonable degree of scientific certainty that living in close proximity to oil and gas facilities results in increased health risks and impacts from elevated air pollution levels and that these health risks are increasingly attenuated further from these operations. CAA Ex. 25 at 2, 11. The public health risks and impacts associated with air pollutant emissions from oil and gas facilities that go unaddressed would be disproportionately experienced by people who live, work, and go to school near oil and gas facilities. CAA Ex. 25 at 2-3.

Peer-reviewed air quality health risk assessment studies indicate cancer and noncancer health risks increase with increasing proximity to oil and gas development sites. CAA Ex. 25 at 14. The scientific literature points to the need for frequent if not continuous leak detection using modern and advanced leak detection methods capable of identifying leaks. EDF Ex. RR at 8. The body of epidemiological literature strongly supports that geographic proximity to active oil and gas development is an important risk factor for a variety of adverse health outcomes, including:

respiratory outcomes, cardiovascular outcomes and cardiovascular disease indicators, childhood cancer, hospitalizations, and adverse birth outcomes. CCA Ex. 25 at 1, 14-15.

The increased frequency of LDAR inspections within 1,000 feet of “occupied areas” proposed by the Community and Environmental Parties, the Environment Department, and Oxy at 20.2.50.116 NMAC is a targeted strategy to increase public health protections.

**6. The proximity proposal will protect the health of vulnerable persons living near oil and gas facilities, some of whom already suffer from adverse health conditions**

EDF estimates that the proposal will protect the health of over 35,000 New Mexicans living within 1,000 feet of a wellsite. Of those, over 2,700 are children under the age of 5, more than 4,500 are adults 65 years or older, more than 5,700 are living in poverty, and 19,000 are people of color, including over 5,800 Native Americans. EDF Ex. SS at 15.

Many of these people already suffer from health conditions that could be exacerbated by exposure to additional air pollution. These include more than 3,800 adults with asthma, over 2,200 adults with coronary heart disease, almost 2,600 with chronic obstructive pulmonary disease, and more than 1,200 adults who have experienced or are at risk of a stroke. EDF Ex. DD; EDF Ex. SS at 15; 8 Tr. 2596:23-2597:4.

Many of the people living within 1,000 feet of a well site in New Mexico are people of color and Native Americans. 8 Tr. 2626:14-16. People of color and Native Americans in New Mexico are at a disproportionately higher risk of health conditions exacerbated by additional air pollution, which includes asthma, heart disease and cancers. 8 Tr. 2624:16-24, 2626:17-21.

**7. The proximity proposal is cost effective**

The proximity proposal’s LDAR requirements are highly cost effective when calculating the compliance costs divided by the VOC reductions. The proximity proposal will increase

annual emissions reductions by 3,600 tons of VOC. 8 Tr. 2595:19-20. This represents an incremental increase in LDAR costs of \$4.8 million (or 13% higher) from the Environment Department's initial proposal, and results in an average cost of **\$894 per ton VOC reduced** within the proposed 1,000 foot boundary (or \$349 per ton VOC reduced statewide). EDF Ex. DD; EDF Ex. SS at 4-5; 8 Tr. 2595:19-20. A review of other jurisdiction's LDAR requirements demonstrates that an average cost of **\$894 per ton of VOC reduced** is very reasonable, as other jurisdictions have adopted LDAR requirements with significantly higher compliance costs. 8 Tr. 2599:2-2600:1. The costs to implement the proximity proposal are economically feasible and entirely reasonable. 10 Tr. 3214:19-22.

C. **The EIB Should Adopt the Proposal from the Community and Environmental Parties to Strengthen the Pneumatics Provision at 20.2.50.122 NMAC**

1. **Substantial evidence supports the proposal to accelerate the phase out of polluting pneumatic controllers**

a. **The parties propose an accelerated phase out, consistent with precedent from Colorado**

The Community and Environmental Parties support the Environment Department's proposal to require operators to replace pneumatic controllers that are designed to emit air pollutants with zero-emission alternatives. The Community and Environmental Parties propose certain changes to strengthen the Environment Department's proposal and make it more effective.

First, and most importantly, Community and Environmental Parties propose to accelerate the transition to zero-emitting controllers to ensure that New Mexico is not needlessly delaying the important environmental benefits. The undisputed evidence shows that pneumatic devices are one of the largest sources of VOC emissions in New Mexico. See CAA Ex. 3 at 7–8.

Fortunately, it is possible to replace polluting pneumatic controllers with devices that perform

the same function without polluting. Alternatives to polluting controllers include electric controllers and compressed air systems. *Id.* at 8–9. Retrofitting polluting controllers with zero-emission alternatives is a cost-effective method of reducing emissions. *Id.*

In 2020, Colorado’s Air Quality Control Commission adopted regulations that require operators to retrofit a substantial portion of their polluting pneumatic controllers by May 2023. CAA Ex. 3 at 11–12. For example, Colorado’s rule would require a compressor station operator with a historic percentage of non-emitting controllers of 0 to 20% to retrofit 20% of its polluting controllers by May 2022, an additional 25% of its controllers by May 2023. CAA Ex. 3 at 12–13. Colorado’s rule was adopted unanimously, with support from the oil-and-gas industry.

The Environment Department’s proposal is similar to Colorado’s rule, but provides for a much slower transition to zero-emission devices. To give an example, a Colorado operator of natural gas gathering compressor stations that currently has no non-emitting controllers would have to convert 45% of its controllers at those stations by May 2023. Under the Environment Department’s proposal, such an operator would only be required to convert 25% of its controllers by 2024, and would not be required to match the Colorado requirement **until January 2027**. CAA Ex. 23 at 4.

The Community and Environmental Parties’ proposal would accelerate the compliance timeline, while setting two deadlines (May 1, 2023 and May 1, 2025) instead of three deadlines in the Environment Department’s proposal (January 1, 2024, January 1, 2027, and January 1, 2030). *See* CAA Ex. 3 at 15. Oxy supports accelerating the transition to zero-emitting devices, and proposes modifications to the rule that would accelerate this transition. *See* Oxy Reb. Ex. 1 at 25-26.

**b. The accelerated phase out would substantially reduce emissions, at reasonable cost**

Pneumatic controllers are one of the largest sources of VOC emissions in New Mexico. Clean Air Task Force estimates that there are over 118,000 pneumatic controllers in New Mexico that collectively emit 30,000 metric tons of VOC per year and 108,000 metric tons of methane. CAA Ex. 3 at 7–8. Because these devices emit so much pollution each year, the speed with which the phase out occurs has major implications for public health and the environment. Each additional year of delay means thousands of additional tons of VOCs and tens of thousands of additional tons of methane will be emitted. *Id.* at 21. The impacts of this pollution are irreversible. Accordingly, it is critical that the phase out occur as quickly as possible.

The weight of the evidence indicates that the accelerated phase out proposed by Community and Environmental Parties is achievable at reasonable cost. The required pace of retrofits under the program would still be very reasonable and similar to that required in Colorado. This accelerated schedule would therefore not increase overall costs in any significant way; at most, it would require owners and operators to incur some of these costs sooner than they otherwise might (while also increasing cumulative environmental benefits and ensuring that these benefits accrue sooner). CAA Ex. 3 at 25. **Notably, no party submitted analysis indicating that the total cost of the retrofit program increases if retrofits occur in earlier years.** CAA Ex. 23 at 6.

The Environment Department estimated that the pneumatic retrofit program would cost \$2,596 per ton of VOC reduced for gathering and boosting stations, \$5,023 per ton of VOC reduced for transmission compressor stations, and \$2,745 per ton of VOC reduced for wellhead and tank battery facilities. CAA Ex. 3 at 23. The Department overestimated costs and underestimated benefits, so the program is even more cost-effective than this analysis suggests.

CAA Ex. 3 at 23–25. Since there is no evidence that the total cost of the retrofit program increases if retrofits occur in earlier years, it follows that the Community and Environmental Parties’ program can be implemented at reasonable cost as well.

**c. Substantial evidence supports the Community and Environmental Parties’ proposal to require sites with electric power to retrofit within six months**

Community and Environmental Parties proposed that sites with access to electric power, gas processing plants, and transmission compressor stations should all convert to non-emitting controllers within six months of the effective date of the rule. *See* CAA Ex. 22 at 25 (proposed 20.2.50.122.B(3) NMAC). It has long been recognized that it is simpler, easier, and less expensive to convert sites with electricity to non-emitting controllers. CAA Ex. 23 at 19. The Environment Department’s technical analysis shows that all gas processing plants in New Mexico are already using non-emitting controllers, and all of them have access to commercial line electric power. Further, this analysis finds that all transmission compressor stations have access to electric power. CAA Ex. 3 at 16. Kinder Morgan’s expert, Leslie R. Nolting, testified that Kinder Morgan has access to commercial power at its transmission compressor stations, and even employs emergency engines to provide **backup** power in the event commercial power is lost due to inclement weather or electric grid equipment failures. CAA Ex. 23 at 24; KM Exhibit VI to Notice of Intent at 19.

There is precedent for requiring a very rapid phase-out of polluting pneumatic devices at larger facilities with access to grid electric power. In December 2017, Colorado required operators of gas processing plants in the Front Range Nonattainment Area to convert to non-emitting pneumatic controllers by May 1, 2018 (i.e., within six months). CAA Ex. 3 at 16–17. Accordingly, the EIB should adopt this aspect of the Community and Environmental Parties’

proposal.

**d. Substantial evidence supports Community and Environmental Parties' proposal to require operators to achieve a fixed increase in the percentage of non-emitting controllers, rather than reaching a fixed end point**

The Community and Environmental Parties propose a change to the structure of the phase-out table. Specifically, Community and Environmental Parties propose that operators be required to achieve a fixed increase in the **percentage** of non-emitting controllers, rather than reaching a fixed end point. This makes the rule more effective, more equitable, and less arbitrary, and is consistent with the structure of the rule in Colorado. CAA Ex. 3 at 2, 18. No party put forward evidence opposing this change. Accordingly, EIB should adopt this change.

**e. Substantial evidence does not support the Environment Department's proposal to exempt operators from further retrofits if 75% of their controllers are non-emitting by January 2025**

The Environment Department has proposed a provision that states: "if an owner or operator meets at least seventy-five percent total non-emitting controllers by January 1, 2025, the owner or operator has satisfied the requirements of table 1 and 2". CAA Ex. 3 at 25 (quoting the proposed 20.2.50.122.B(4)(c)(v) NMAC). The proposed exemption makes the rule less effective because it could result in a large number of pneumatic devices not being converted, even where it would be technically feasible and cost-effective to do so. CAA Ex. 3 at 26. The Environment Department has not set forth any technical or economic basis for this exemption. The Environment Department's analysis shows that it is technically feasible to retrofit emitting controllers with zero-emission controllers and that the cost per ton of VOCs abated is reasonable. The incremental benefits of an additional retrofit are the same regardless of what the operator's historic percentage is.

**f. Substantial evidence does not support NMOGA's proposal to exempt stripper well operators from the pneumatics retrofit program**

NMOGA proposes to exempt operators that produce less than 15 barrels of oil equivalent per well per day from the pneumatic retrofit requirement. NMOGA Statement of Intent to Present Technical Testimony, App. A at 47 (proposed section 20.2.50.122.B(3)(c) NMAC). NMOGA's proposed exemption is based on language in the Colorado rule. However, NMOGA's proposal would exempt **twice as many wells** as are exempted by the Colorado rule. CAA Ex. 23 at 21. NMOGA's exemption would apply to much larger firms than the Colorado exemption. For example, Hillcorp Energy Co. would be eligible for the exemption created by NMOGA, and would not have to conduct any retrofits at the **11,400 wells** it owns in New Mexico. The exemption proposed by NMOGA is far too broad. The EIB should reject it.

**g. Substantial evidence supports the proposal to require operators to include polluting pneumatic controllers in their LDAR programs**

Community and Environmental Parties proposed requiring operators to include pneumatic devices in their leak detection and repair program. Community and Environmental Parties' Ex. 1 at 26 (proposing a new subsection at 20.2.50.116.C(4) NMAC). Since 2018, Colorado has required operators to perform LDAR on polluting pneumatics in the Denver Metro/North Front Range Ozone Nonattainment Area. This requirement was extended to the rest of the state in 2020. CAA Ex. 23 at 3. The Environment Department has incorporated this proposal into its most recent proposal. *See* NMED Jan. 18, 2022 Version of Proposed 20.2.50 NMAC at 28-29. NMOGA and Oxy have also indicated that they support this proposal. *See* Oxy Reb. Ex. 1 at 26-27; 7 Tr. 2110:5–10 [Meyer Test.]. Accordingly, the EIB should adopt this provision.

**D. The Community and Environmental Parties and Oxy's Proposal to Reduce Emissions from Storage Vessels Should Be Adopted**

The Community and Environmental Parties and Oxy propose adding a subsection to 20.2.50.123 NMAC or “Section 123” to require the use of storage vessel measurement systems for storage vessels at new and modified facilities. Community and Environmental Parties’ Ex. 1 at 28. The proposal would reduce emissions by requiring operators to employ a measurement system that eliminates the need to open the thief hatch when conducting routine measurements of the quantity and quality of the liquid. CAA Ex. 3 at 27. This proposal mirrors almost word for word an amendment to Regulation 7 adopted by the Colorado Air Quality Control Commission in December 2019. CAA Ex. 3 at 27 (citing 5 Colo. Code Regs. § 1001-9:D.II.C.4).

Substantial evidence shows that the proposal reduces VOC emissions (as well as methane and toxic or cancer-causing hazardous air pollutants) at reasonable cost. In addition, the proposal has important safety co-benefits, by reducing the risk that workers opening a thief hatch will be injured or killed due to the inhalation of tank vapors.

The Environment Department adopted the Community and Environmental Parties’ proposal in large part. However, there are two important differences that render the Environment Department’s proposal less protective than the Community and Environmental Parties and Oxy’s proposal. First, the Environment Department’s proposal only requires use of a storage tank measurement system capable of measuring the **quantity** of liquid, but would not require a system to measure the **quality** of liquids. Second, the Environment Department’s proposal would allow operators to open a thief hatch “as necessary for custody transfer.”

The weight of the evidence supports requiring operators to use a storage vessel management system to measure **quality** (i.e., to conduct samples) of liquid. The evidence shows that a variety of alternative systems exist to sample the liquids in the vessel. See CAA Ex. 3 at 27 (examples of alternative systems that do not require venting include systems that comply with

Chapter 18.2 of American Petroleum Institute Manual of Petroleum Measurement Standards, or by installing a Lease Automatic Custody Transfer unit). The evidence further shows that the Colorado proposal—which required a system to sample the quality of the liquid—is cost-effective. Accordingly, there is no reason to adopt a watered-down version of the Colorado provision.

Second, there is no evidence to support the Environment Department’s addition of language allowing operators to open a thief hatch “as necessary for custody transfer.” This provision is ambiguous and could be used to circumvent the intent of the rule because a purchaser’s desire to measure the quantity and quality of the liquid manually could be deemed sufficient reason to open the thief hatch even though it is not necessary to open the hatch. While there may be valid reasons to open a thief hatch (i.e., to conduct repairs), substantial evidence shows that routine measurement and sampling of liquid can and should occur without emissions.

Substantial evidence supports adopting the Community and Environmental Parties’ proposal in full, and the EIB should adopt it.

**E. The Community and Environmental Parties and Oxy’s Proposal to Reduce Emissions During Completion and Recompletion of Wells Should Be Adopted**

**1. The proposal is modeled after Colorado rules already in place**

The Community and Environmental Parties and Oxy propose requirements to reduce emissions during completions and recompletions of wells at 20.2.50.127 NMAC by requiring operators to route initial flowback to enclosed, controlled flowback vessels during completion and recompletion of wells. *See* Community and Environmental Parties’ Ex. 1 at 35-36. The Community and Environmental Parties and Oxy’s proposed, at 20.2.50.127 NMAC, is modeled after rules adopted in 2020 by the Colorado Air Quality Control Commission and the Colorado

Oil and Gas Conservation Commission (“COGCC”) with one significant change. The Community and Environmental Parties and Oxy’s completions/recompletions proposal deletes Colorado language requiring flowback vessels to be “vapor tight.” This change was made to ensure that operators install a pressure relief system to prevent dangerous static buildup and discharge. 10 Tr. 3232:16-3233:5 [Alexander Test.]; 10 Tr. 3307:1-6 [Holderman Test.].

## **2. Implementation of the proposal is safe**

EDF witness Tom Alexander and Oxy witness Danny Holderman testified in support of this proposal. Both Mr. Alexander and Mr. Holderman, an engineer, have expertise in completions; both managed completions for major oil and gas companies.

Flowback tanks are used during oil and gas pre-production activities and can lead to uncontrolled VOC and methane emissions if the tanks are not designed to contain these vapors. EDF Ex. EE at 23 [CDPHE Cost-Benefit Analysis for Regulation 7]. The VOC and methane emissions from completions/recompletions are not insignificant. *See* EDF Ex. EE at 26-27, Tables 12 & 13.

Mr. Alexander explained to the EIB how, under the proposal, emissions from “initial flowback” would be routed to flowback vessels. He explained how the flowback vessels have a pressure relief system to accommodate any safety issues that could arise from significant changes in pressure or flow rates. Any emissions from a pressure relief system must be routed to a flare equipped with an auto-ignitor or continuous pilot light to minimize venting and emissions during completions and recompletions. EDF Ex. UU at 12.

Both Mr. Alexander, who was Vice President of Health, Safety and Environment at a major oil and gas company, and Mr. Holderman testified that implementation of the proposal is

safe. Indeed, operators in Colorado have not raised any concerns with implementing the completions/recompletions requirements with CDPHE.

3. **NMOGA's only objection that the proposal is unsafe is based on a mischaracterization of the terms of the proposal**

NMOGA's only real objection to the completions/recompletions proposal came from Mr. Smitherman who **mischaracterized** the proposal as requiring "vapor tight" vessels.<sup>2</sup> Mr. Smitherman incorrectly characterized the proposal even though he admitted during cross-examination that he was aware that the "vapor tight" language had been removed because of safety concerns. 10 Tr. 3352:9-18.

Mr. Smitherman's concern had to do with the "static buildup" that could occur during initial flowback with a "vapor tight" vessel. 10 Tr. 3322:3-14. However, as Mr. Holderman explained:

First, Oxy USA removed the vapor tight reference [from EDF and Clean Air Advocates' original proposal] because it could be read to exclude pressure relief systems which are an essential safety feature for control systems. The general control language Oxy USA has proposed would not restrict pressure relief systems and is more consistent with safe operation.

10 Tr. 3307:1-6.

Mr. Smitherman provided **no testimony** why the Community and Environmental Parties and Oxy's proposal, removing the vapor tight language, is problematic from a safety standpoint.

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<sup>2 2</sup> Mr. Smitherman stated:

So let's talk about flowback vessels. We've had a lot of conversation about those today.

**Some parties have recommended that vessels that receive flowback fluid from wells after completion be required to be vapor tight,** I've heard some other terms, and have automatic tank gauging systems.

**This is not advisable for safety concerns.**

10 Tr. 3319:25-3320:3321:6 (emphasis added).

Therefore, there is **no evidence** in the record why implementation of the completions/recompletions proposal would be unsafe.

And there's more than substantial evidence in the record from Mr. Holderman, an engineer with specialized knowledge of completions, and Mr. Alexander, a former safety director with specialized knowledge of completions, the requirements for reducing emissions from completions and recompletions from the proposal are safe. Moreover, both Colorado's air pollution agency and its oil and gas agency have adopted similar rules, after hearing, and the CDPHE report no operator complaints or issues with the requirements.

#### **4. The completions/recompletions proposal is cost effective**

There is substantial evidence in the record that the completions/recompletions proposal is cost effective, and **no evidence** in the record to the contrary.

Based on CDPHE's September 2020 detailed cost-benefit analysis for its flowback vessel rule, EDF environmental engineer Hillary Hull calculated the cost for the Community and Environmental Parties and Oxy's completions/recompletions proposal would be **\$259.48 per ton of VOC reduced**, which is cost effective according to Ms. Hull. EDF Ex. SS at 15; EDF Ex. UU at 14; 10 Tr. 3283:1-10.

When Mr. Alexander was a Completions Manager, his company was completing 400 to 500 horizontal wells a year. According to Mr. Alexander "we understood the costs" of completions and, in his expert opinion, the Community and Environmental Parties and Oxy's completions/recompletions proposal is cost effective and the costs "are very, very reasonable." 10 Tr. 3229:6-3230:17; EDF Ex. UU at 13-14.

No **industry party** presented a cost-benefit analysis for the Community and Environmental Parties and Oxy's completions/recompletions proposal or rebutted EDF's cost-benefit calculations.

**5. The completions/recompletions proposal fills a regulatory gap**

Neither the U.S. Environmental Protection Agency nor the New Mexico Oil Conservation Commission requires flowback to be routed to enclosed, controlled flowback vessels during initial flowback. 10 Tr. 3233:7-3234:6; -3234:13-21. The Community and Environmental Parties and Oxy's completions/recompletions proposal fills "a gap" in those rules, will reduce VOC and methane emissions during the initial flowback stage, and will strengthen the EIB's final rule. 10 Tr. 3234:3-6.

**6. The Environment Department recommends the EIB base its decision the testimony of the parties**

At hearing, the Environment Department took no position on the completions/recompletions proposal because the Environment Department lacked sufficient expertise in the area, and recommended the EIB decide the issue based on the testimony of the other parties. 10 Tr. 3380:24-3381:9.

In this case, there is more than substantial evidence in the record that the Community and Environmental Parties and Oxy's completions/recompletions proposal will reduce VOC and methane emissions, is cost effective, and poses no safety issues. There is **no evidence** in the record that the proposal is unreasonably costly or that the proposal, as drafted excluding the "vapor tight" language and allowing for a pressure relief system, poses safety risks. Based on the testimony and evidence of the parties, the EIB should adopt the Community and Environmental Parties and Oxy's completions/recompletions proposal.

### **III. NMOGA'S COST ANALYSIS IS NOT RELIABLE**

NMOGA presented evidence that purported to show the costs to the oil and gas industry in New Mexico of the proposed rule. The evidence consisted of a ten-page memorandum prepared by John Dunham and Associates, and the testimony of Mr. Dunham summarizing the memorandum. NMOGA SOI App. A6 (attachment); NMOGA SOI App. A6; 3 Tr. 667:19-679:7. Mr. Dunham concluded that the proposed rule would cost the New Mexico oil and gas industry an astounding \$3.2 billion in the first year.

However, Mr. Dunham's "analysis" is deeply flawed in myriad ways. It applies exaggerated cost estimates; it cherry-picks costs while ignoring benefits; it incorrectly assumes that the proposed rule will not create any jobs; it assumes the proposed rule will not generate any tax revenues; and it makes bald assertions that are unsupported. Given the multitude of serious flaws in the analysis, three witnesses – including two witness testifying on behalf of the Environment Department – testified that Mr. Dunham's memorandum and testimony should not be given any weight. NMED Reb. Ex. 19 at 2 [Day & Palmer Reb. Test.]; 3 Tr. 757:2-7; 767:22-768:1; 830:11-15.

#### **A. Mr. Dunham Overstates the Costs to Industry of the Proposed Rule**

Mr. Dunham repeatedly overstates the costs of the proposed rule on the oil and gas industry in New Mexico. The pervasiveness of these overstatements strips Mr. Dunham's analysis of any credibility.

First, Mr. Dunham overstates the number of oil and natural gas wells that would be subject to the emission control requirements of the proposed rule. He testified, and his memorandum states, that there are 33,293 oil wells and 50,954 natural gas wells in New Mexico. He gives no support for these figures. NMOGA App. A6 Attachment at 4, Table 3; *see also* 3

Tr. 741:7-19. Yet according to Mr. Brandon Powell, who is the Engineering Bureau Chief of the Oil Conservation Division in the N.M. Energy, Minerals and Natural Resources Department, and who testified for the Environment Department, there are 26,808 active oil wells and 26,530 active natural gas wells in New Mexico, 37 percent fewer than Mr. Dunham's figures. 3 Tr. 741:7-19; NMED Reb. Ex. 17 [Powell Reb. Test.] at 2-4. Further, many of these active wells are either located in counties not subject to the proposed rule, or are subject to the small business exemption in the proposed rule. According to the EDF count, a total of only 49,615 oil and gas wells would actually be required to install emission controls under the proposed rule. EDF Reb. Ex. EEE at 3 [Lackner Reb. Test.]; 3 Tr. 825:13-826:16. The number of oil and gas wells that are subject to the proposed rule is a critical number for any estimate of the costs of the rule. By overstating the number of wells, Mr. Dunham substantially overstated the costs of complying with the proposed rule. 3 Tr. 759:15-19; *see also* NMED Reb. Ex. 19 at 6 [Day & Palmer Reb. Test.].

Second, Mr. Dunham overstates the costs of the proposed rule by tallying the costs of pollution control equipment per individual well rather than per well site. NMOGA App. A6 Attachment at 7, Table 7; *see also* NMED Reb. Ex. 19 at 7 [Day & Palmer Reb. Test.]; 3 Tr. 760:11-20. This approach overstates the compliance costs because some of the pollution control equipment required under the proposed rule will be installed at a well site and will provide adequate controls for two or more wells located at that site. It is therefore more accurate to tally the costs of pollution control equipment by the number of well sites. NMED Reb. Ex. 19 at 6-7 [Day & Palmer Reb. Test.]; 3 Tr. 759:25-760:20.

Third, Mr. Dunham overestimates the costs of certain components of pollution control equipment that will be required by the proposed rule. Most significantly, he estimates the capital

costs for pollution control equipment for glycol dehydrators to be \$794 million in the first year. NMOGA App. A6 Attachment at 7, Table 7; *see also* NMED Ex. Reb. 19 at 10-11 [Day & Palmer Reb. Test.]; 3 Tr. 764:12-25. He provides no basis for this estimate. By contrast, the Environment Department's witness, Brian Palmer, a senior scientist with ERG, estimates the total annual costs for controlling pollution from glycol dehydrators to be only \$4.6 million based on ERG calculations set forth in a spreadsheet. 3 Tr. 765:1-8; NMED Ex. 77; *see also* NMED Reb. Ex. 19 at 10 [Day & Palmer Reb. Test.]. Similarly, and again without any basis, Mr. Dunham estimates the capital costs for pollution control equipment for storage tanks to be \$185 million in the first year. NMOGA App. A6 Attachment at 7, Table 7; *see also* NMED Reb. Ex. 19 at 11 [Day & Palmer Reb. Test.]; 3 Tr. 766:1-2. Mr. Palmer estimates the total annual costs for controlling pollution from storage tanks to be \$69 million based on ERG calculations. 3 Tr. 766:2-3; NMED Ex. 100; *see also* NMED Reb. Ex. 19 at 11 [Day & Palmer Reb. Test.].

Fourth, Mr. Dunham appears to double-count the costs of some components of pollution control equipment. In his memorandum, he lists the costs for pollution control from several specific pollution sources, including compressors, gas well liquid unloading, glycol dehydrators, hydrocarbon liquid transfers, pipeline pig launching and receiving, pneumatic controllers and pumps, and storage tanks. He separately lists the costs for various specific pollution control equipment, including enclosed combustion devices and thermal oxidizers, vapor recovery units, and open flares. He then adds both these cost figures into the total. Yet the listed pollution control equipment is used to control emissions from the listed pollution source equipment. He thus appears to be counting those costs twice. NMOGA App. A6 Attachment at 7, Table 7; NMED Reb. Ex. 19 at 11-12 [Day & Palmer Reb. Test.]; 3 Tr. 766:14-767:10.

Fifth, Mr. Dunham does not consider the additional revenue producers could realize from captured natural gas. The proposed rule would require operators to capture some of the natural gas that would otherwise leak. This natural gas can be marketed. EDF estimates that New Mexico producers waste about \$300 million worth of natural gas per year. This revenue would off-set the costs of compliance with the proposed rule. EDF Reb. Ex. EEE at 4 [Lackner Reb. Test.]; 3 Tr. 827:25-828:10; 727:23-728:5.

And sixth, Mr. Dunham's calculation of the net present value of compliance costs is unrealistic. He calculates the net present value of the costs over a five-year period. NMOGA App. A6 Attachment at 8, Table 8. However, a more realistic time period would be 10 to 20 (or 15) years based on the usual useful life of pollution control equipment. NMED Reb. Ex. 19 at 13-14 [Day & Palmer Reb. Test.]; 3 Tr. 768:25-769:11. Mr. Dunham also assumes that the bulk of the capital costs of the proposed rule will be incurred in the first year. NMOGA App. A6 Attachment at 7-8; NMED Reb. Ex. 19 at 14 [Day & Palmer Reb. Test.]; EDF Reb. Ex. EEE at 3 [Lackner Reb. Test.]; 3 Tr. 769:12-14; 826:22-25. However, capital costs are typically spread out over the life of the equipment. NMED Reb. Ex. 19 at 14 [Day & Palmer Reb. Test.]; 3 Tr. 769:12-21. Moreover, several components of the proposed rule allow for delayed compliance. EDF Reb. Ex. EEE at 4 [Lackner Reb. Test.]; 3 Tr. 826:22-827:2. Thus, the industry will not need to incur all of the costs in the first year, as it has both the ability to phase in compliance activities and the ability to finance compliance activities over a longer time-period. 3 Tr. 810:16-811:6.

**B. Mr. Dunham Does Not Consider the Benefits of the Proposed Rule**

In addition to overstating the costs of the proposed rules, Mr. Dunham ignores its benefits. NOx and VOC pollution from oil and gas production, and the consequential ozone

pollution, imposes various costs on sectors of New Mexico's economy other than the oil and gas industry, and on New Mexico society as a whole. These costs are often called "externalities" because they are external to the price paid for oil and gas; they are not borne by the consumers of oil and gas products, but by others. 3 Tr. 694:22-695:4. By reducing NO<sub>x</sub>, VOC, and ozone pollution, the proposed rule also reduces these external cost. This is an important benefit.

To properly analyze the costs of the proposed rule, the EIB needs to fully consider both the associated costs and the associated benefits. Mr. Dunham stated that although his firm conducts cost-benefit analyses, and that he has personally conducted "many" cost-benefit analyses, NMOGA asked him to prepare an analysis only of costs, not of benefits. By doing so, Mr. Dunham presents to the EIB a one-sided and incomplete picture.

For example, oil and gas production results in emissions of NO<sub>x</sub> and VOCs, which are harmful air pollutants and create unhealthy air. NO<sub>x</sub> and VOCs also contribute to the formation of ground-level ozone, another harmful pollutant. By reducing these pollutants, the proposed rule would benefit all New Mexicans, especially those who live and work near oil and gas facilities. Mr. Dunham omits these benefits from his analysis. EDF Reb. Ex. EEE at 5 [Lackner Reb. Test.]; 3 Tr. 828:22-829:4.

Oil and gas production and distribution also results in the emission of methane, a potent greenhouse gas. EDF estimates the costs of these emissions to be at least \$1,500 per metric ton. In addition, the combustion of oil and gas products results in emissions of carbon dioxide, also a greenhouse gas. EDF estimates the costs of these emissions to be at least \$51 per metric ton. The proposed rule would reduce these emissions, thus benefitting New Mexicans. Again, Mr. Dunham omits these benefits from his analysis. EDF Reb. Ex. EEE at 4-5 [Lackner Reb. Test.]; 3 Tr. 828:12-21; *see also* EDF Ex. GGG; EDF Ex. HHH.

Mr. Dunham acknowledged the possibility that the emissions of harmful pollutants from oil and gas production result in increased medical bills, lost days of work due to illness, and higher mortality rates. 3 Tr. 689:25-691:3. But Mr. Dunham does not consider that the proposed rule will reduce these societal costs, to the benefit of New Mexicans. 3 Tr. 691:4-12.

**C. Mr. Dunham Incorrectly Assumes the Proposed Rule Will Not Create Jobs**

Although Mr. Dunham discusses jobs that would purportedly be lost under the proposed rule, he assumes that the rule will not create any jobs. This assumption is certainly incorrect. Research prepared by Datu Research for EDF demonstrates that the methane mitigation industry is a young, but fast-growing source of high-quality jobs across the country. These companies anticipate hiring more employees if additional methane regulations are adopted. EDF Reb. Ex. EEE at 5 [Lackner Reb. Test.]; 3 Tr. 829:20-830:3; *see also* EDF Ex. III [Datu Research report].

Moreover, during his testimony, Mr. Dunham acknowledged that the manufacture, installation, and maintenance of the pollution control equipment required under the proposed rule would create jobs, including jobs in New Mexico. However, Mr. Dunham did not consider these new jobs in his analysis; he only considered jobs that would be lost. 3 Tr. 696:17-699:5. He further testified that the proposed rule would both create jobs and take away jobs, but he did not know what the net effect on jobs would be. 3 Tr. 713:4-23.

**D. Mr. Dunham Incorrectly Assumes the Proposed Rule Will Not Create Tax Revenues**

As with jobs, Mr. Dunham discusses the tax revenue that he believes would be lost under the proposed rule, but he assumes that the proposed rule will not generate any tax revenues. During his hearing testimony, Mr. Dunham acknowledged that the manufacture and installation of the pollution control equipment required by the proposed rule would generate tax revenues. But Mr. Dunham did not consider these additional tax revenues in his analysis. 3 Tr. 699:6-22.

**E. Mr. Dunham Did Not Adequately Document His Analysis**

Another flaw in Mr. Dunham's analysis is that he provides little or no documentation or other information to support his conclusions. He does not provide underlying data, assumptions, spreadsheets, model codes, or other information to support the assertions in his memorandum. Consequently, it is difficult and in many cases impossible to evaluate his analysis. NMED Reb. Ex. 19 at 1 [Day & Palmer Reb. Test.]; 3 Tr. 756:19-23; *see also, e.g.*, NMED Reb. Ex. 19 at 3, 6, 7, 8-9, 10, 12, 13, 16 [Day & Palmer Reb. Test.]; 3 Tr. 760:21-24; 761:3-11; 767:12-18; 767:22-768:1; 769:25-770:3; 770:20-23; 770:24-771:3.

For example, some of the data in his memorandum was taken from a survey of ten oil and gas operators in New Mexico. But he did not submit the original data from the survey to the Environment Department, nor did he share them with the other parties. They are not part of the record of this proceeding, and they cannot be evaluated. 3 Tr. 681:11-682:6. Similarly, in his analysis Mr. Dunham relied on a model developed by the Western Energy Alliance, a trade association representing the oil and natural gas industry. But the Western Energy Alliance model is not part of the record of this proceeding. Again, it cannot be evaluated. 3 Tr. 701:10-702:4.

Thus, for all of these reasons, the cost analysis that Mr. Dunham prepared for NMOGA is badly flawed. The EIB should not give it any weight and should disregard its conclusions.

**IV. THERE IS INSUFFICIENT EVIDENCE TO SUPPORT A GENERAL EXEMPTION FOR LOW PRODUCING OR LOW EMITTING WELLS**

The Environment Department proposed a narrow exemption for "small business facilities" that would exempt oil and gas operations that meet the criteria from some, but not all, requirements of 20.2.50 NMAC. *See* NMED Reb. Ex. 23 at 20.2.50.7.VV, -111.B, C, & -125 NMAC [NMED's Sept. 16, 2021 Proposed 20.2.50 NMAC].

Under the Environment Department’s proposal, a “small business facility” is a source that is independently owned and is not a subsidiary of another company, has 10 or fewer employees, and has a gross annual revenue less than \$250,000. *Id.* at 20.2.50.7.VV NMAC. The Environment Department backed up its proposal with detailed analysis from ERG economist Susan Day and Environment Department Air Quality Bureau Chief Liz Bisbey-Kuehn on the numbers of oil and gas companies that meet each of the three criteria and the Environment Department’s rationale for selecting the criteria. In recognition of the potential economic difficulty of compliance for low producing operations, the Environment Department proposes emissions thresholds for many sections of its proposed rule. *See generally* 3 Tr. 870:9-885:18 [Day and Bisbey-Kuehn Test.].

In response to the Environment Department’s proposal, NMOGA proposed to delete the exemption entirely claiming that it couldn’t identify any oil and gas companies that meet the criteria. While NMOGA witness John Smitherman testified at some length about the supposed economic hardships of the Environment Department’s proposed rules on small operators, NMOGA nonetheless maintained its position throughout its direct and rebuttal notices of intent (“NOI”) filings and at hearing proposing to delete the small business facility exemption. NMOGA did not propose a general exemption of its own. *See* NMOGA App. B at 7; NMOGA Ex. 47 at 7; 4 Tr. 991:18-19, -996:14-997:15.

IPANM, on the other hand, took an unorthodox and confusing approach on whether there should be a general exemption for low producing or low emitting operations. In its direct NOI, IPANM witness Ryan Davis opposed the Environment Department’s small business facility exemption, recommending that it “not be adopted,” and urged an “alternative approach” to broaden the exemption. IPANM Ex. 2 at 20. However, while the EIB’s rules require parties to

“include the text of any recommended modifications to the proposed regulatory change” in notices of intent to present technical testimony, 20.1.1.302.A(5) NMAC, IPANM failed to include any recommended modifications in its direct or rebuttal NOIs or at hearing. *See* IPANM Ex. 1 [Proposed Modifications]; IPANM Notice of Intent to Present Rebuttal Technical Testimony; 3 Tr. 931:13-22. Instead IPANM acknowledged that “IPANM is not proposing specific language at this time to accomplish this end . . . .” IPANM Ex. 2 at 20.

At hearing, Mr. Davis gave extended but exceedingly general testimony on the claimed hardship to smaller oil and gas operators with complying with the Environment Department’s proposed rule, and encouraged the EIB to return to the Environment Department’s pre-petition proposal exempting low production and low emitting wells. 3 Tr. 905:7-15; *see also* IPANM Ex. 10 at 28-29.

However, Mr. Ryan failed to provide the EIB and the parties with any proposed language in support of this suggestion and failed to provide any analysis whatsoever that would support such a proposal. Mr. Ryan did not even offer the emissions threshold IPANM would support. Mr. Ryan acknowledged during cross-examination that IPANM had not proposed any specific language or any data or economic analysis to support IPANM’s very loose proposal. 3 Tr. 930:10-20, -932:3-24.

Mr. Ryan acknowledged he understood the EIB’s rules required parties proposing modifications to submit proposed language in their NOIs. 3 Tr. 930:21-931:6. Without proposed language, there is no proposal before the EIB; it is impossible to evaluate any proposal; and the parties’ right to cross-examine on any proposal is undermined. *See* NMSA §, 74-2-6.D (under Air Quality Control Act, all interested persons have a reasonable opportunity to examine witnesses testifying at the rulemaking hearing).

Any rule adopted by the EIB must supported by substantial evidence in the whole record. With no analysis, data, or information in support, there is no “substantial evidence” in support of IPANM’s suggestion that the EIB return to the Environment Department’s pre-petition proposal, and there is no basis for the EIB to consider let alone adopt IPANM’s suggestion. The EIB should summarily reject IPANM’s suggestion and not expend its limited resources deliberating on IPANM’s threadbare recommendation.

## **V. THE HEARING OFFICER CORRECTLY DECIDED IPANM’S OBJECTION TO EVIDENCE ON METHANE**

In a September 16, 2021 email to counsel, IPANM counsel objected to any mention of the word “methane” in any party’s testimony or exhibits. In that email, IPANM counsel identified dozens and dozens of references to the word “methane” in testimony and exhibits from the Department, EDF, Clean Air Advocates, Center for Civic Policy and NAVA EP, and the Law Center. *See* Sept. 16, 2021 email from L. Rose, Montgomery & Andrews, P.A., to L. Katz, NMED.<sup>3</sup> IPANM never filed a formal motion setting forth its objection.

The Hearing Officer heard argument, 9 Tr. 2798:20-2816:7, found the evidence admissible, and overruled the objection “for all of the reasons that have been given by the Department and the environmental advocates,” 9 Tr. 2815:5-8. She found that “what may go beyond the exact rule crafted is that a lot of what's being discussed as a co-benefit is inextricable. I'm not sure how you extricate some of what we've been talking about from the rule that's been

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<sup>3</sup> The objection verged on the absurd when, for example, IPANM objected to the listing of three articles by Ms. Hill in her list of references because the articles’ titles contained the word “methane,” although in fact one of the references objected to referred to “**nonmethane** hydrocarbon levels” and not to “methane.” IPANM’s word search for “methane” made for an overly broad objection. *See* CAA Ex. 25 [Hill Reb. Test. attaching References]; IPANM Objections to Exhibits attached to Sept. 16, 2021 email from L. Rose, Montgomery & Andrews, P.A., to L. Katz, NMED (referring to CAA Ex. 25, Rebuttal Testimony of Lee Ann Hill at . . . 26:1-3; 27:1-4, 8-10.”).

crafted.” 9 Tr. 2815:8-15.

The Hearing Officer correctly overruled IPANM’s objection to evidence related to methane emissions, control technology for methane emissions, impacts from methane emissions, and the social cost of carbon. As the Environment Department explained, the purpose of this rule is to “regulate emissions of ozone precursor pollutants from the oil and gas sector” and, that “[a]s a co-benefit of reducing emissions of volatile organic compounds (“VOCs”) that contribute to ozone formation, [the rule] would also reduce emissions of the potent greenhouse gas methane, which is released into the atmosphere alongside VOCs as a result of oil and gas operations.” NMED Statement of Reasons at 1 (May 6, 2021). Evidence related to methane emissions is critically important to this rulemaking. The EIB can and should consider this evidence.

First, evidence related to the measurement and control of methane emissions bears directly on the measurement and control of VOC emissions. Methane and VOCs are both components of natural gas, meaning they are co-emitted when sources leak, vent, or flare natural gas. 1 Tr. 232:7–11. Since methane is the largest component of natural gas, scientists and regulators who are interested in VOC emissions often measure methane emissions and use this information to estimate VOC emissions.<sup>4</sup> For example, Dr. Lyon's testimony summarized the results of 16 studies, including five conducted in the Permian Basin, that directly measured methane or hydrocarbon emissions from oil and gas sources. EDF relied on these direct measurements to compose an inventory of methane emissions from oil and gas sources in New

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<sup>4</sup> See EPA Control Techniques Guidelines for the Oil and Gas Industry, NMOGA Ex. 3 at 2-6 (“Most of the VOC emission estimates presented in this document are based on methane emissions data because we only had methane emissions information for the evaluated sources. We calculated VOC emissions using ratios of methane to VOC in the gas for the different segments of the industry.”).

Mexico. 8 Tr. 2596: 5-14. EDF then converted this inventory to VOCs using New Mexico-specific gas composition data. 8 Tr. 2589:21-2590:1, -2596: 5-14. EDF relied on the VOC emissions and reductions from this inventory as evidence of the cost effectiveness of its proposals and the Environment Department's LDAR proposal. 8 Tr. 2590:6-9, -2597:11-19.

Similarly, the same technologies are used to control both VOC and methane emissions, because any control technology that prevents natural gas from escaping to the atmosphere will reduce emissions of both pollutants.

Second, the EIB has clear authority to consider methane co-benefits in crafting rules under the Air Quality Control Act. The Air Quality Control Act authorizes the EIB in a rulemaking to give the weight it deems appropriate to “the character and degree of injury to or interference with health, welfare, visibility and property”; and the “public interest.” NMSA 1978, § 74-2-5.F(1), (2).

Methane emissions negatively impact the environment as a potent greenhouse gas. Given the breadth of destructive impacts of climate change, the EIB has more than ample statutory authority to consider the impact of these emissions on “health,” “welfare,” “property,” and “public interest” when crafting a rule to control VOCs. NMSA 1978, § 74-1-9.B(1).

Indeed, it is standard practice for environmental agencies to consider co-benefits when crafting air quality regulations. See INSTITUTE FOR POLICY INTEGRITY, THE IMPORTANCE OF EVALUATING REGULATORY “CO-BENEFITS” at 2 (2017) (explaining that “EPA—under presidents of both parties and across three decades—has consistently taken indirect benefits into account when evaluating Clean Air Act regulations”). For example, when the U.S. Environmental Protection Agency promulgated VOC emission standards for oil and gas sources in 2012, it

devoted considerable attention to the co-benefits the rule would achieve in reducing methane emissions. See 77 Fed. Reg. 49490 at 49513.

The law is clear that the EIB has authority to consider the impacts associated with methane pollution in this rulemaking. In fact, excluding this evidence might well constitute an abuse of discretion. See *In re Application of Rhino Env't Servs.*, 2005-NMSC-024, ¶ 7 (finding an abuse of discretion testimony related to “the impact of the proliferation of landfills on a community’s quality of life” was excluded in a hearing on a permit application for a new landfill); *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1193–1203 (9th Cir. 2008) (U.S. Department of Transportation acted arbitrarily by refusing to consider the climate change impacts of its fuel economy standards).

Third, the Community and Environmental Parties subject to IPANM’s objection only seek adoption of requirements that directly control VOCs. See *e.g.*, 8 Tr. 2590:6-9 (testimony of Dr. Lyon noting that EDF is only relying on estimates of VOCs and not methane for the basis for EDF's estimates of the cost effectiveness of the Environment Department and EDF's proposals). No party seeks adoption of requirements to directly control methane. The evidence presented by the Community and Environmental Parties in support of requirements to reduce VOCs included evidence of VOCs reductions from control technologies and the costs to implement VOC control technologies. On the other hand, the purpose of evidence the Community and Environmental Parties provided on methane and hazardous air pollutants was related to the co-benefits that would accrue by adopting VOC control requirements to help attain ozone National Ambient Air Quality Standards. See *e.g.*, 8 Tr. 2593:14-23 (testimony of Ms. Hull describing the VOC reductions that will accrue to the people of New Mexico based on the Community and

Environmental Parties' LDAR proximity proposal, as well as the "co-benefits by reducing 14,300 tons of methane and 150 tons of hazardous air pollutants annually.");

The Hearing Officer's ruling was proper, and there is no reasonable basis for the EIB to overturn it.

## **VI. THE HEARING OFFICER CORRECTLY DECIDED THE TWO MOTIONS TO STRIKE NMOGA'S EVIDENCE**

### **A. Striking NMOGA's Unsupported Comments in its Proposed Amendments to 20.2.50 NMAC in Appendix B and Exhibit 47 Was Proper**

#### **1. NMOGA submitted approximately 180 unsupported comments in its proposed amendments that the Hearing Officer struck**

On September 15, 2021, Clean Air Advocates and EDF filed their Motion to Strike Unsupported "Comments" from NMOGA's Amendments to Proposed 20.2.50 NMAC. Clean Air Advocates and EDF moved to strike "comments" that NMOGA had inserted in proposed amendments to 20.2.50 NMAC in Appendix B of its direct NOI and Exhibit 47 of its rebuttal NOI. NMOGA had inserted approximately **180 "comments"** after each of its proposed amendments, but in all but the rare case there was no witness testimony in support and NMOGA failed to cite to any supporting evidence in either exhibit. *See generally* CAA and EDF's Mot. to Strike Unsupported Comments.<sup>5</sup>

In response, NMOGA claimed supported its comments in its redlined amendments with testimony, but only provided **one** example where a witness allegedly adopted comments in one of NMOGA's redlined sections – Section 20.2.5.223 NMAC. *See generally* NMOGA Res. to CAA and EDF's Mot. to Strike (Sept. 19, 2021). But even that example referred to only one of

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<sup>5</sup> Counsel for Clean Air Advocates objected to NMOGA's unsupported comments in Appendix B during the prehearing conference held by the Hearing Officer on August 19, 2021. CAA and EDF's Mot. to Strike at 4. Despite being on notice of the defect in Appendix B filed with its direct NOI, NMOGA failed to cure in its rebuttal NOI.

NMOGA's 16 comments in that section of its last redline, and NMOGA did not even begin to provide support for the rest of its 180 or so comments laced throughout its redlines. *See* CAA and EDF Reply in Support of Mot. to Strike at 3-4 (Sept. 19, 2021).

At the beginning of the hearing, the Hearing Officer granted the motion to strike, and directed NMOGA to file a revised Appendix B and Exhibit 47 excluding the unsupported "comments" in NMOGA's proposed amendments. 1 Tr. 35:4-8, -36:11-15 & 20-25, -38:2-7.

The Hearing Officer found:

But I think at this moment, [NMOGA's comments are] premature and my recommendation would be that the Board disregards for the moment these comments throughout Exhibit B and Exhibit 47 because they're not, if you will, cited to testimony or to exhibits just yet.

1 Tr. 35:4-8.

2. **Allegations in Parties' NOIs must be supported with evidence, and the Hearing Officer correctly excluded NMOGA's unsupported "comments"**

The EIB's procedural rules require any person who intends to present "technical testimony" at hearing to file a notice of intent to present technical testimony. 20.1.1.302.A NMAC. The notice "shall" include the "direct testimony" of each technical witness, the "text" of any recommended modifications to the proposed regulatory change, and all "exhibits anticipated to be offered by" the technical witness. 20.1.1.302.A(4)-(6) NMAC. The Order and Procedural Order in this matter both require compliance with 20.1.1.302 NMAC and require parties to submit witness testimony and exhibits in the parties' notices of intent. Order at ¶¶ 2, 3; Procedural Order at 1. "Technical testimony" means "scientific, engineering, economic or other specialized testimony, but does not include legal argument, general comments, or statements of policy or position concerning matters at issue in the hearing." 20.1.1.7.S NMAC.

The only proper way to make technical argument in a notice of intent before the EIB is to file testimony of a technical expert. A technical expert can then offer exhibits as part of his or her testimony. The EIB's rules do not allow parties to allege technical facts or offer expert technical opinion in their notices of intent (or at hearing) that is not supported by a witness. Furthermore, there is no accepted practice before the EIB that allows a party to submit unsupported "comments" to its proposed modifications without substantiating those comments with testimony or citing to the evidence in the record to support any such commentary.

The EIB's procedural rules serve an important purpose. By requiring parties to make technical argument, and introduce technical exhibits, through the testimony of identified experts, the rules ensure that the parties and the EIB have the opportunity to (1) consider the qualifications of the person making the technical argument and (2) question that person about the basis for his or her opinions at the hearing. It would have been impossible to evaluate or cross-examine anonymous technical comment in NMOGA's redlines, which is why the EIB's rules do not allow for it.

NMOGA had two opportunities, in its direct NOI and rebuttal NOI, to submit evidence in support of its "comments" in Appendix B and Exhibit 47, and failed to do so. The Hearing Officer's exclusion of its unsupported "comments" was entirely proper and there is no reasonable basis for the EIB to overturn her decision.

**B. Striking Certain NMOGA Exhibits NMOGA Offered in Surrebuttal on the Grounds of Unfair Surprise Was Proper**

**1. NMOGA submitted technical evidence in surrebuttal that should have been offered in rebuttal that the Hearing Officer struck**

On September 27, 2021, Clean Air Advocates, EDF and the Environment Department filed a Joint Motion to Strike Parts of NMOGA's Proposed Surrebuttal on LDAR. The parties

moved to strike following materials, filed as “surrebuttal” by NMOGA on September 23, 2021, and any related testimony:

- Two Excel spreadsheets entitled “LDAR Gathering Boosting Station Incremental Analysis” and “LDAR Well Sites Incremental Analysis;”
- Certain slides, amended by the parties to include Slides 10, 11, and 29<sup>6</sup>, from a PowerPoint entitled “Topic 27S 20.2.50.116 Equipment Leaks & Fugitive emissions” relating to testimony to be given by John Smitherman on NMOGA’s estimated LDAR costs and emissions reductions (“LDAR Surrebuttal PowerPoint”).
- Slides 52 to 56 relating to “occupied areas” in the LDAR Surrebuttal PowerPoint.

*See generally* Joint Mot. to Strike. The two Excel spreadsheets and first set of slides from the LDAR Surrebuttal PowerPoint **directly rebutted** testimony and exhibits filed by the Environment Department in its **direct NOI** to support its estimated costs and emissions reductions for its LDAR proposal. The second set of slides **directly rebutted** testimony and exhibits filed by EDF in **direct NOI** to support its “proximity proposal” to increase LDAR inspection frequencies at well sites located within 1,000 feet of homes, businesses and schools.

In its rebuttal case, filed September 7, 2021, NMOGA presented the testimony of six witnesses. *See* NMOGA Exs. 41-46. None of the six witnesses discussed the Environment Department’s LDAR proposal in any depth, let alone rebutted any of the Environment Department’s cost or emission reduction estimates. Likewise, none of NMOGA’s witnesses

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<sup>6</sup> NMOGA did not number its slides. The slides excluded are:

- Slide 10 entitled “NMOGA Model Plant – Well Sites” with a chart entitled “Average Fugitive Emissions Component Count for Natural Gas Well Site Model Plan – GHGRP Data,”
- Slide 11 entitled “NMOGA Model Plant – Well Sites” with a chart entitled “Average Fugitive Emissions Component Count for Oil Well Site Model Plan – GHGRP Data,” and
- Slide 29 with a chart entitled “Gathering and Boosting Facility Model Plant Based On Colorado State University – Dept. of Energy Study (CSU-DOE) – Gathering and Boosting Compressor Stations.”

discussed the proximity proposal put forth by EDF, Clean Air Advocates, CCP and NAVA EP, let alone rebutted the EDF estimates of costs or emissions reductions to implement the proximity proposal.

Not only should the materials been offered in rebuttal, NMOGA clearly had the materials and information in its possession since at least **July 2021**. 8 Tr. 2359:18-2360:2; -2375:17-24.

While NMOGA should have and could have presented this technical evidence it called “surrebuttal” in its notice of intent to present **rebuttal** technical testimony, submitting it so late in the prejudiced the Environment Department, Clean Air Advocates, and EDF because they had no opportunity to respond to the late-filed, new evidence.

The Hearing Officer agreed, finding that:

. . . although NMOGA has had certain data around the feasibility of some of the LDAR provisions since July, it chose to offer it in these spreadsheets just a handful of days ago, after the hearing had started. The other parties don't really have an opportunity to study the data and provide their own analysis of it with just a couple days left in the hearing.

8 Tr. 2375:17-24. She ruled that:

. . . this new data should be excluded and not presented today, when we're doing LDAR, on the basis that really no rulemaking petitioner should be surprised by new data toward the end of a hearing, particularly when, you know, in this case the rulemaking petitioner has been so vigorously engaged in negotiating on all fronts really throughout the rulemaking.

8 Tr. 2376:8-15; *see also* 8 Tr. 2364:24-2365:9; -2481:8-12.<sup>7</sup>

The Hearing Officer further found that, if the EIB were to review her decision and admit NMOGA’s late-filed materials, it would need “. . . to allow the other parties, particularly the

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<sup>7</sup> The Hearing Officer found the late-filed materials “. . . should be excluded from the Board's consideration because they reflect data that NMOGA has had since July that was offered on the afternoon of the fourth day of hearing.” 8 Tr. 2481:8-12.

Department who would be surprised by this new data, an opportunity to actually study it and develop their own answer to it,” which would need to be scheduled “another day of hearing for sometime in the future.” 8 Tr. 2376:20-2377:5.

2. **Parties Must Timely Rebut Direct Cases and Cannot Do So in Surrebuttal, and the Hearing Officer Properly Excluded NMOGA’s Late-Filed Evidence**

The Hearing Officer -- who is very experienced and was very familiar with the complex technical evidence presented in this case -- understood that NMOGA not only should have rebutted the Environment Department and EDF’s **direct** LDAR evidence in **rebuttal**, but that NMOGA had the evidence to do but instead decided **not** to rebut the Environment Department and EDF’s direct evidence in rebuttal. NMOGA chose to sit on its evidence and offer it in “surrebuttal” **four days into the hearing** when the other parties had no opportunity to respond. NMOGA filed its evidence late, in contravention of the EIB’s rules, and the late-filed evidence submitted in its “ambush” should be excluded. There is no reasonable basis to overturn the Hearing Officer’s decision to exclude.

Furthermore, overturning her decision would unnecessarily delay this proceeding because the EIB would need to give the parties an opportunity to respond to NMOGA’s late-filed evidence and hold a “mini-hearing” on these LDAR issues.

Finally, NMOGA suffers little or no prejudice by the exclusion. NMOGA nonetheless was able to submit extensive evidence on its estimated emissions reductions and costs of LDAR. *See generally* 8 Tr. [Smitherman Test.].

**Conclusion**

For the reasons set forth herein and in the Community and Environmental Parties’ Joint Proposed Statement of Reasons, the Community and Environmental Parties’ respectfully request

the EIB to adopt each of their proposed amendments at 20.2.50.113, -116, -122, -123, and -127 NMAC to the Environment Department's proposed 20.2.50 NMAC.

Respectfully submitted,

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Certificate of Service

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